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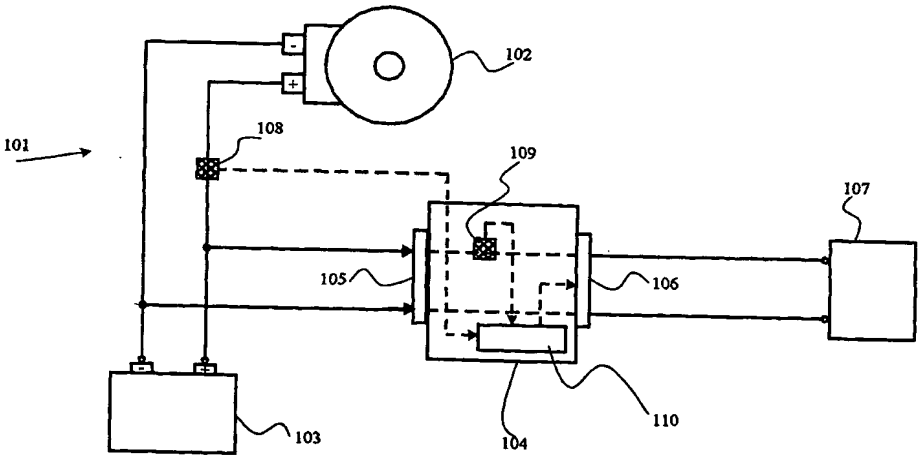
(54) Title: INVERTER



(57) Abstract: The present invention relates to an inverter and a method for converting direct current voltage to alternating current voltage. The inverter comprises a first input arranged to be connected to the ordinary current supply system of a vessel, where the current supply system comprises a generator connected to a battery, and an output arranged to be connected to an alternating current motor, where, for at least a period of time, the alternating current motor requires a first torque M_1 in order to rotate. The inverter comprises, in addition, a regulating circuit arranged to measure a charging current from the generator to the battery and to measure the voltage level in the battery. The regulating circuit is, in addition, arranged to permit a certain output current from the vessel's ordinary current supply system to the inverter which is higher than the charging current, in a first operating mode. The regulating circuit is, in addition, arranged to limit the output current while maintaining the torque for the alternating current motor, in a second operating mode.

WO 2005/002040 A1